

# **BIOSENSOR WITH MULTI-CHANNEL A/D CONVERSION AND A METHOD THEREOF**

## **ABSTRACT OF THE INVENTION**

5

A biosensor with multi-channel A/D conversion and a method thereof are provided. The present biosensor includes a chip generating a time-dependent analog signal in response to a content of a specific component of a specimen provided thereon, a multi-channel A/D  
10 converter, and a microprocessor. The multi-channel A/D converter has multiple channels simultaneously receiving the time-dependent analog signal in each sampling interval to convert the time-dependent analog signal to a set of digital signals. The microprocessor receives the sets of digital signals in a period of sampling time and determines the content of  
15 the specific component based on the sets of digital signals. The present biosensor provides a multi-channel A/D conversion for the time-dependent analog signal to improve the resolution of the determination of the content of the specific component.

20